Date: Wed, 20 Jul 94 04:30:27 PDT
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
Precedence: Bulk
Subject: Ham-Ant Digest V94 #230
To: Ham-Ant

Ham-Ant Digest Wed, 20 Jul 94 Volume 94 : Issue 230

Today's Topics:

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

Date: 19 Jul 94 21:16:00 GMT
From: news-mail-gateway@ucsd.edu
Subject: (none)
To: ham-ant@ucsd.edu

In digest 229 Kevin (KD1SV) writes:
>
>I want to build a 3-element yagi for 17 meters. I would greatly
>appreciate any information about available plans for such an antenna.
>I have Carr's Practical Antenna Handbook, but lack any experience
>in designing antennas. So I think a set of plans would be advisable.
>
> Thanks,

>
>   Kevin KD1SV

The following was taken from the ARRL antenna handbook.

For a 3 element yagi on 17 Meters (18.1 MHz) and .17 spacing:

Driven element (472/18.1) 26' .75"
Reflector   (492/18.1) 27' 4"   (about 5% longer than driven)
Director 1   (458/18.1) 25' 3.5"   (about 5% shorter than driven)

As for the matching, I prefer gamma matching:

The gamma rod should be about 1/3 the diameter of the driven element.
The length should be around .04 - .05 wavelength (about 2' 5")
The spacing from the driven element should be around .007 wavelength.
(about 5 inches from the center of the driven element)

You can match it to 1:1 SWR by adjusting the length of the fed
side of the driven element (adding and subtracting capacitance).
OR you can add an adjustable cap (about 7pf per meter) 120pf or so
and adjust it for 1:1 SWR then replace it with a fixed value of
the correct value (AND HIGH ENOUGH VOLTAGE!). The do fine tuning
by adjusting the gamma match connection point on the driven
element in and out.

The ARRL handbook has pages and pages of "generic" designs for
all kinds of antennas. There is an extended version of this section
of the handbook in the ARRL Antenna Handbook.

Good Luck

Kevin

Kevin R. Muenzler, WB5RUE   The University of Texas Health
muenzlerk@uthscsa.edu   Science Center at San Antonio,

Date: 19 Jul 1994 12:28:03 -0400
From: peach!atl1!w4qo@uunet.uu.net
Subject: 2M ladderline J-pole?
To: ham-ant@ucsd.edu

Path: atl1!w4qo
Date: 19 Jul 94 16:12:26 GMT
Message-ID: <w4qo.774634346@atl1>
Newsgroups: rec.radio.amateur.antenna
Subject: Re: 2M ladderline J-pole?
References: <philkeys-140794171802@ptpm002.olympus.net>

Here is a brief explanation of how to build a j-pole out of a piece of
450 ohm twinlead.

1. You can cut the twinlead to 19 1/4 inches or if you don't mind wasting
some cut it to 54 1/4 inches. If you use the longer measurement, cut one
side down to leave 18 1/2 inches and skip to step 3.

2. If you use the shorter measurement, cut another 3/4 inch off of one
side, and using a 35 inch piece of wire extend the other to a total of 54
1/4 inches.

3. Solder the "bottom" two ends to opposite corners of a female chassis
mount coax connector, i.e. ground both ends. This can be a BNC or UHF
connector.

4. Then from the center of the coax connector run a 3 inch wire up and
make a right angle bend about 1/2 inch from the top. Scrape off the
insulation on the "long" side of the J-pole to line up with the wire that
has been bent over. Solder the part bent over to the long side wire.
You may have to vary the point at which you solder it or the total length
of the 3 inch wire for best SWR.

Good luck. 73, Jim, W4QO

Date: 19 Jul 1994 10:30:37 -0500
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!chpc.utexas.edu!news.utdallas.edu!
corpgate!crchh327.bnr.ca!debaker@network.ucsd.edu

Subject: Best HF mobile antenna??
To: ham-ant@ucsd.edu

Hello,

I am thinking about getting into HF mobile operation, and have been
looking at the available options. So far this includes the OUTBACKER,
BUG CATCHER, and HUSTLER series, as well as many home brew options.
I would like 10/20/40M operation if possible, and therefore I am
particularly interested in comments (good and bad!) about the OUTBACKER.

I am looking for opinions and suggestions about these and any other
currently available HF mobile antennas. I will be mounting this on
an old (77) Olds, so size/weight is not a problem.

Thanks in advance for any comments or ideas.
73,
+---+
| David E. Baker   Internet: debaker@bnr.ca (Richardson, TX, USA) |
| Callsign: AB5PI   Amateur Packet: AB5PI@N5AUX.#DFW.TX.USA.NA |
| My opinions do not necessarily reflect the opinions of my employer |
+---+

Date: Tue, 19 Jul 1994 16:28:42 GMT
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!
newsxfer.itd.umich.edu!zip.eecs.umich.edu!yeshua.marcam.com!news.kei.com!world!
hrick@network.ucsd.edu
Subject: Carrier-current antenna alternative
To: ham-ant@ucsd.edu

In article <30fvug$5hj@apakabar.cc.columbia.edu>,
Richard Branden Emmerson <rbe3@konichiwa.cc.columbia.edu> wrote:
>
>The Ramsey manual mentions something called "carrier-current" but tactifully
>evades saying anything more on it. Essentially it is an antenna alternative
>which allows the signal to be broadcast through a building's power outlets via
>internal wiring. I have not been able to find any information on this topic
>in any ARRL book or maazines or anywhere!
>
>If anyone knows how to set up a "carrier-current" antenna configuration or
>knows where any information on this topic can be found, I would be greatly
>appreciative. Either post on this group or email rbe3@columbia.edu with any
>information. Thanks!
>
Carrier current is normally done at AM broadcast frequencies. Since it
involves the potentially dangerous practice of connecting a transmitter's

output stage to a power line, it probably is not a great idea for a home-brew project. An informative booklet about carrier current broadcasting is sold by Panaxis Productions, PO Box 130, Paradise CA 95967.

Date: 19 Jul 1994 14:32:17 -0400
From: ankh.iia.org!mary.iia.org!not-for-mail@uunet.uu.net
Subject: HELP...Reception problem.
To: ham-ant@ucsd.edu

Hi:

  I was wondering if you guys in here might be able to help me, since you seem to be the resident experts on radio reception.

  I work in a building in the low reception area of my favorite radio station. I don't have an external antenna on my clock-radio, but have gotten SOME results from moving around the power cord, wrapping my phone cord around my arm while I type, etc...

  Is there any way I can get better reception that would be cheap and easy, like wrapping tinfoil around the power cord, or anything like that?

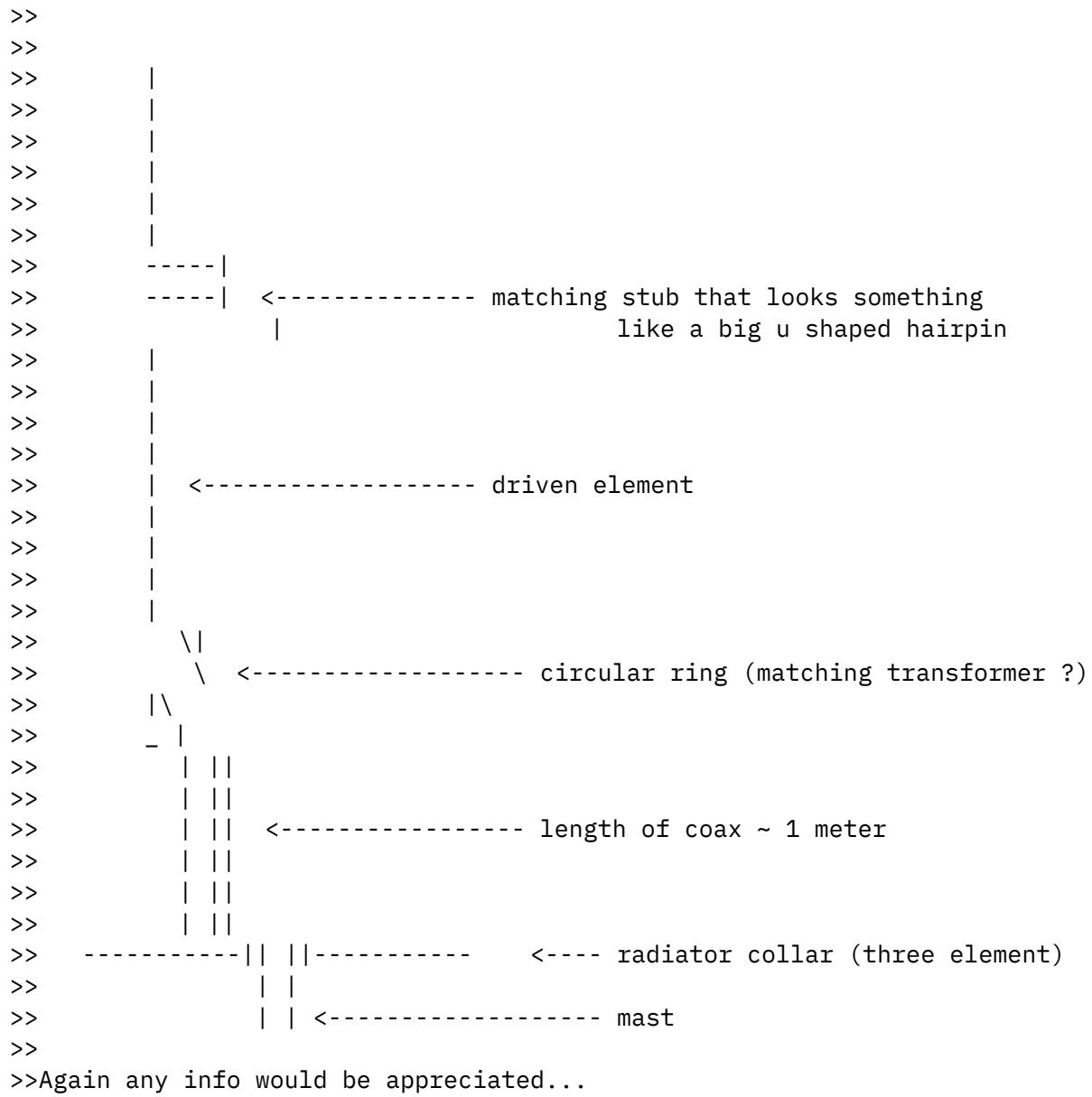
  Please help.....
                          Joe Average Radio Listener

PLEASE MAIL response to gautier@iia.org. I do not normally read this newsgroup, although I guess I will watch it for an answer for a few days

--
Richard A. Gautier   Home Page: http://www.iia.org/~gautier/me.html
Net Personality   Email: gautier@iia.org
Don't worry, if it DOES kill you, you'll never have to do it again!

Date: Tue, 19 Jul 1994 15:47:55 GMT
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!europa.eng.gtefsd.com!
newsxfer.itd.umich.edu!jobone!ukma!ovation!ramcad.pica.army.mil!
mellis@network.ucsd.edu
Subject: Help Identifying Cushcraft Antenna
To: ham-ant@ucsd.edu

In article <30dvdu$q8s@bmerha64.bnr.ca> Wayne Salhany writes:
>>I have acquired a Cushcraft antenna and am not sure which model it is. The
>>following is a "from memory" description. Any help with respect to
>>it's model and frequency coverage would be appreciated.



>>Again any info would be appreciated...
>>
>>Wayne
>>VE3WQS
>>
>>salhany@bnr.ca>
>
>Looks like a ringo ranger to me. The dimensions will affect whether it is
>for 2 meters or the other vhf bands (not sure exactly which ones Cushcraft
>made them for). What do you guys/ gals think? 73, Tom WB4iUX
>

==========

Yup. A Ringo Ranger II. Model ARX2B. I got one. Covers lots of freq
bands, depending on the dimensions, like Tom said.

Mark E. Ellis   N2WZB   Systems Administrator
                                PA&TD Software Quality Engineering Branch
<mellis@ramcad.pica.army.mil>   SMCAR-QAH-A, Bldg 62N, (201) 724-5817
                  Picatinny Arsenal, NJ

Date: Tue, 19 Jul 1994 11:19:21
From: ihnp4.ucsd.edu!swrinde!emory!nntp.msstate.edu!martin.cdpa.state.ms.us!
martin@network.ucsd.edu
Subject: JPOLE Plans, how to post to this group via email
To: ham-ant@ucsd.edu

I have the plans for 2 mtr JPOLEs made from copper and twin lead. I am using
trumpet as my news reader and it doesn't allow me to copy a file into the post
message area. If someone can tell me how to put a posting here via email, I
will post the message containing the jpole plans.

                                ____
                               / |
   John W. Martin   / | INTERNET:
   Systems Programmer   / | martin@server.cdpa.state.ms.us
   Mississippi Central Data | C | oamartin@vm.cc.olemiss.edu
   Processing Authority   \   D | PACKET:
   301 North Lamar Street | P | kb5ggo @ k5qne.ms.usa.na
   301 Building, Suite 508   /   A |
   Jackson, MS 39201-1495   / | PHONE: (601) 359-2641
                            |______ | FAX: (601) 354-6016
                                 / |
                                 ____|

Date: 19 Jul 1994 08:32:15 -0700
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!asuvax!chnews!ornews.intel.com!
ornews.intel.com!not-for-mail@network.ucsd.edu
Subject: Trees as antennas, Effects of trees
To: ham-ant@ucsd.edu

In article <CsxxE0.AyC@fore.com> ed@fore.com (Ed Bathgate) writes:

>A while back somebody posted about using live trees as antennas.
>How did you load the tree?
I guess that was my post. I haven't loaded a live tree myself but
I did mention some details about it from a QSO I had with a

fellow who had once done research for the military. I do remember
that he said the tuner was complicated. The feedpoint was the focus
of our conversation. They drive a spike through the side of the
tree such that it makes maximum contact with the outer rings under
the bark. This is where the most moisture is.

>What effect is there from running a wire up a live tree and using it
>as an antenna? a helically wound tree?

I have done this. Works good on 80 meters. Keep the wire as far from
the trunk as possible. The helically wound trunk is a bad idea.
My version was actually a slight sloper with wire attached near the
top of a 70' Cedar tree and feed at the ground about 10 feet from the
trunk. Only two 60' radials plus a ground rod were used. Compared to
a full size 80 meter dipole 50' high, the vertical greatly attenuated
local signals and local QRN while raising the DX signals only slightly.
The reduction in local noise is well worth it for listening to weaker
signals.

--
zardoz@ornews.intel.com WA7LDV   from Oregon - The BEAVER state
I speak only for myself.   A Honeymoon salad = lettuce alone

Date: Wed, 20 Jul 1994 03:26:49 GMT
From: world!hrick@uunet.uu.net
Subject: usefulness of cheap 75:300 baluns
To: ham-ant@ucsd.edu

Many 300-ohm receiving antennas (TV+FM yagis, for example) come with
a little 75 to 300 ohm balun transformer. I've opened a few of these up,
and inside they contain a small two-hole ferrite core with a few turns
of wire going hither and yon. (I wondered if there was any transformer
in there at all, or if they were a complete rip-off.) Anyhow, my question
is, could these be used for QRP VHF transmission? Is there any way to
make a wild guess as to how many microwatts or milliwatts one of these
babies could handle before it begins to saturate? What are the symptoms
of a saturated balun?

Date: Tue, 19 Jul 1994 11:05:07
From: ihnp4.ucsd.edu!swrinde!emory!nntp.msstate.edu!martin.cdpa.state.ms.us!
martin@network.ucsd.edu
Subject: Wanted: dual band twinlead jpole plans

To: ham-ant@ucsd.edu

I need the plans for making a dual band (2mtr/440) jpole antenna out of 300 ohm twin lead. I have the plans for a 2mtr jpole. I have seen such an antenna at a ham fest several years ago, but have never seen any plans. Please post back here for others to see as well.
Thanks, John kb5ggo

End of Ham-Ant Digest V94 #230
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